# \*\*\* STUDENT'S T - TEST \*\*\*

The variances are equal since

V2.60 Dec 91 - by Stanley Kaplan, Ph.D. FLIGHT DARK MIXED RAHF VS DEPT DARK MIXED RAHF % FIBER TYPES (RAHF 1-4) 2.2632 with 3 . 3 degrees of freedom. Calculated F-ratio =

2.2632 is less than

9.2800

#### \*\*\* R A W DATA\*\*

|                 |  | GROUP 1            | GROUP 2        |         |
|-----------------|--|--------------------|----------------|---------|
| 1 ===>          |  | 9.0000             | 2.0000         | **      |
| 3 ====>         |  | 18.0000<br>15.0000 | 15.0000        | •       |
|                 |  |                    |                |         |
| N° s            | :::::::::::::::::::::::::::::::::::::: | 4                  | 4              |         |
| Total           | m m m >-                               | 57.0000            | 41.0000        |         |
| Means           | =====>                                 | 14.2500            | 10.2500        | 10      |
| Sum of squares  | ====>                                  | 42.7500            | 96.7500        | ,       |
| Variances       |  | 14.2500            | 32.2500        |         |
| Std deviations  | ===>                                   | 3.7749             | 5.6789         |         |
| Calculated valu | ue of T =                              | 1.1732 with        | 6 degrees of f | reedom. |

The exact P-value is: 0.2852 OF 71.48%

The samples do NOT differ significantly at the 5% level, ONE-TAILED. The samples do NOT differ significantly at the 1% level. ONE-TAILED.

The samples do NOT differ significantly at the 5% level, TWO-TAILED. The samples do NOT differ significantly at the 1% level, TWO-TAILED.

## \*\*\* STUDENT'S T - TEST \*\*\*

V2.60 Dec 91 - by Stanley Kaplan, Ph.D.

FLIGHT INTERMED MIXED RAHF VS DFPT INTERMED MIXED RAHF % FT (1-4) AL Calculated F-ratio = 1.0439 with 3 , 3 degrees of freedom.

The variances are equal since 1.0439 is less than 9.2800

#### \*\*\* R A W D A T A \*\*\*

|  |                | GROUP 1                                  | GROUP 2                               |          |
|--|----------------|--|---------------------------------------|----------|
| 1 ====><br>2 ====><br>3 ====><br>4 ====> |                | 38,0000<br>28,0000<br>35,0000<br>26,0000 | 14.0000<br>7.0000<br>5.0000<br>0.0000 |          |
| N°s                                      | mmm>           | 4),                                      | 4                                     |          |
| Total                                    | ===>           | 127.0000                                 | 26.0000                               |          |
| Means                                    | ****           | 31.7500                                  | 6.5000                                |          |
| Sum of squares                           | 100 mm 2001 >> | 96.7500                                  | 101.0000                              |          |
| Variances                                | ******         | 32.2500                                  | 33.6667                               |          |
| Std deviations                           | mmm>           | 5.6789                                   | 5.8023                                |          |
| Calculated valu                          | ue of T =      | 6.2200 with                              | n 6 decrees of                        | freedom. |
|  |                |  |                                       |          |

The exact P-value is: 0.0008 or 99.92%

The samples DO differ significantly at the 5% level. ONE-TAILED.

The samples DO differ significantly at the 1% level, ONE-TAILED.

The samples DO differ significantly at the 5% level. TWO-TAILED.

The samples DO differ significantly at the 1% level, TWO-TAILED.

#### \*\*\* STUDENT'S T - TEST \*\*\*

V2.60 Dec 91 - by Stanley Kaplan, Ph.D.

FLIGHT LIGHT MIXED RAHF VS SFPT LIGHT MIXED RAHF % FT (RAHF 1-4) AL Calculated F-ratio = 2.1677 with 3 . 3 degrees of freedom.

The variances are equal since 2.1677 is less than 9.2800

#### \*\*\* R A W D A T A \*\*\*

|                                      |              | GROUP 1                                  | GROUP 2                                  |  |
|--------------------------------------|--------------|--|--|--|
| 1 ===><br>2 ===><br>3 ===><br>4 ===> |              | 53.0000<br>57.0000<br>47.0000<br>59.0000 | 84.0000<br>81.0000<br>80.0000<br>88.0000 |  |
| N° 5                                 | >            | 4 .                                      | 4  |  |
| Total                                | ************ | 216.0000                                 | 333.0000                                 |  |
| Means                                | m == >       | 54.0000                                  | 83.2500                                  |  |
| Sum of squares                       | ===>         | 84.0000                                  | 38.7500                                  |  |
| Variances                            | ===>         | 28.0000                                  | 12.9167                                  |  |
| Std deviations                       | === >        | 5.2915                                   | 3.5940                                   |  |
| Calculated value                     | e of T =     | 9.1455 with                              | 6 degrees of freedom.                    |  |

The exact P-value is: 0.0001 or 99.99%

The samples DO differ significantly at the 5% level. ONE-TAILED.

The samples DO differ significantly at the 1% level. ONE-TAILED.

The samples DO differ significantly at the 5% level, TWO-TAILED.

The samples DO differ significantly at the 1% level, TWO-TAILED.

### \*\*\* STUDENT'S T - TEST \*\*\*

V2.60 Dec 91 - by Stanley Kaplan, Ph.D.

FLIGHT DARK MIXED RAHF VS DEPT DARK MIXED RAHF % FT (RAHF 6-10) AC Calculated F-ratio = 1.3106 with 4 . 4 degrees of freedom.

The variances are equal since 1.3106 is less than

#### \*\*\* RAW DATA \*\*\*

|  |  | GROUP 1  | GROUP 2  |         |
|--|--|--|--|---------|
| 1 ===><br>2 ===><br>3 ===><br>4 ===><br>5 ===> |  | 8.0000<br>5.0000<br>10.0000<br>15.0000<br>5.0000 | 10.0000<br>11.0000<br>11.0000<br>17.0000<br>7.0000 |         |
| N * 53   | >                                      | E  | .5   |         |
| Total  | mmm>                                   | 43.0000  | 56.0000  |         |
| Means  | mmm>                                   | 8.6000   | 11.2000  |         |
| Sum of squares                                 | mmm>                                   | 69.2000  | 52.8000  | 99      |
| Variances                                      | :::::::::::::::::::::::::::::::::::::: | 17.3000  | 13.2000  | 1¥<br>8 |
| Std deviations                                 | mm=>                                   | 4.1593   | 3.6332   |         |
| Calculated valu                                | ue of T =                              | 1.0527 with                                      | 8 degrees of fre                                   | edom.   |

The exact P-value is:

0.3232 Or 67.68%

The samples do NOT differ significantly at the 5% level, ONE-TAILED. The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples do NOT differ significantly at the 5% level. TWO-TAILED. The samples do NOT differ significantly at the 1% level. TWO-TAILED.

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*** STUDENT'S T - TEST ***
             V2.60 Dec 91 - by Stanley Kaplan, Ph.D.
FLIGHT INTERMED MIXED RAHF VS DFPT INTERMED MIXED RAHR %FT (6-10) 44
Calculated F-ratio =
                        2.2802 with 4 . 4 degrees of freedom.
The variances are equal since
                                  2.2802 is less than
                                                            6.3900
                          *** R A W
                                        DATA***
                         GROUP 1
                                               GROUP 2
                         22.0000
                                               11.0000
   3,0000
   2 ====>
                         24.0000
                                               0.0000
                         20.0000
   3 ====>
                                                2.0000
   4 ......
                         36.0000
   5 mmmm>
                         32.0000
                                                0.0000
                             5
                                                    5
  N " 55
               m mm == >-
                        134.0000
                                               16,0000
Total
               3.2000
Means
               mmm >
                         26.8000
Sum of squares ===>
                        188.8000
                                                82.8000
                         47,2000
                                                20.7000
Variances
                          6.8702
                                                 4.5497
Std deviations ===>
                             6.4042 with
                                           8 degrees of freedom.
Calculated value of T =
                          0.0002
                                               99.98%
The exact P-value is:
                                      OF
The samples DO differ significantly at the 5% level, ONE-TAILED.
The samples DO differ significantly at the 1% level, ONE-TAILED.
The samples DO differ significantly at the 5% level. TWO-TAILED.
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The samples DO differ significantly at the 1% level. TWO-TAILED.

# \*\*\* STUDENT'S T - TEST \*\*\*

V2.60 Dec 91 - by Stanley Kaplan, Ph.D.

FLIGHT LIGHT MIXED RAHF VS DFPT LIGHT MIXED RAHF % FT (RAHF 6-10) AC Calculated F-ratio = 2.6311 with 4 . 4 degrees of freedom.

The variances are equal since

2.6311 is less than

6.3900

# \*\*\* R A W D A T A \*\*\*

|  |         | GROUP 1   |       | GROUP 2   |          |
|--|---------|---|-------|---|----------|
| 1 ===><br>2 ===><br>3 ===><br>4 ===><br>5 ===> |         | 70.0000<br>71.0000<br>70.0000<br>49.0000<br>63.0000 |       | 79.0000<br>86.0000<br>89.0000<br>81.0000<br>93.0000 |          |
| N's  | ===>    | 5   |       | 5   |          |
| Total  | ===>    | 323.0000  |       | 428.0000  |          |
| Means  | ===>    | 64.6000   |       | 85.4000   |          |
| Sum of squares                                 | ===>    | 345.2000  |       | 131.2000  |          |
| Variances                                      | ******  | 86.3000   |       | 32.8000   |          |
| Std deviations                                 | ~===>   | 9.2898  |       | 5.7271  |          |
| Calculated val                                 | ue of T | = 4.3028 w  | ith ( | 3 degrees of  | freedom. |

The exact P-value is:

0.0026 OF 99.74%

The samples DO differ significantly at the 5% level, ONE-TAILED. The samples DO differ significantly at the 1% level. ONE-TAILED.

The samples DG differ significantly at the 5% level. TWO-TAILED. The samples DO differ significantly at the 1% level. TWO-TAILED.